

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN THE PATENT APPLICATION OF:

THOMAS G. KRAJEWSKI AND JEFFREY J. DEGROOT

U.S. SERIAL NO: UNKNOWN

GROUP: UNKNOWN

FILED: CONCURRENTLY

EXAMINER: UNKNOWN

FOR:

ENHANCED TOUCH-SCREEN DISPLAY

SYSTEM

La Crosse, Wisconsin October 19, 2001

INFORMATION DISCLOSURE STATEMENT

Assistant Commissioner for Patents Washington, D.C. 20231

Dear Sir:

Applicant encloses copies of U.S. Patent 6,246,394 to Kalthoff et al.; U.S. Patent 6,016,140 to Blouin et al.; U.S. Patent 5,751,276 to Shih; U.S. Patent 5,241,139 to Gungl et al. and U.S. Patent 4,145,748 to Eichelberger et al. The relevance of these patents is discussed in the Background section of the application.

The following patents are also enclosed and discussed.

- U.S. Patent 5,877,458 to Flowers is directed to a surface position location system and method and is not considered particularly relevant to the present invention or touch screens.
- U.S. Patent 5,717,321 to Kerth et al. is directed to drive current calibration for an analog resistive touch screen. The patent proposes (a) converting a digital control valve to a current supplied to the load resistance to thereby produce a voltage across the load

resistance, (b) comparing the voltage across the load resistance to the desired voltage to produce a comparison signal, and (c) adjusting the DC control value in response to the comparison signal so that the voltage across the load resistance becomes substantially equal to the desired voltage.

- $\hbox{U.S. Patent 5,644,308 to Kerth et al. is directed to an algorithmic converter.} \\$
- U.S. Patent 5,543,588 to Bisset et al. shows a touch screen driven handheld computing device.
- U.S. Patent 5,283,559 to Kalendra et al. is directed to automatic calibration of a capacitive touch screen, as opposed to an analog resistive touch screen.

The following non-patent information is enclosed.

A glossy from the Bergquist Company entitled "RTS™ Resistive Touch System" is enclosed where, under the main heading "Touch Screen Features" and the secondary heading "Five-Wire Advantages", simple 2 point calibration versus up to 25 points for others is touted.

An article entitled "Human Input Devices Based on Resistive Touch Screen Sensors" is attached providing general background material. The article is from ECN Magazines, May 15, 2001 Issue, pages 44 and 45.

A second article from ECN's June 2001 Issue entitled "Resistive Touch Screen Controller ADCs - Theory of Operation & Application Challenges" is attached also providing general background information.

The foregoing are included to fully comply with applicant's duty of disclosure and are not considered to be particularly relevant to the invention as claimed.

Respectfully Submitted,

William O'Driscoll Registration No. 33,294

Telephone Number: (608)787-2538